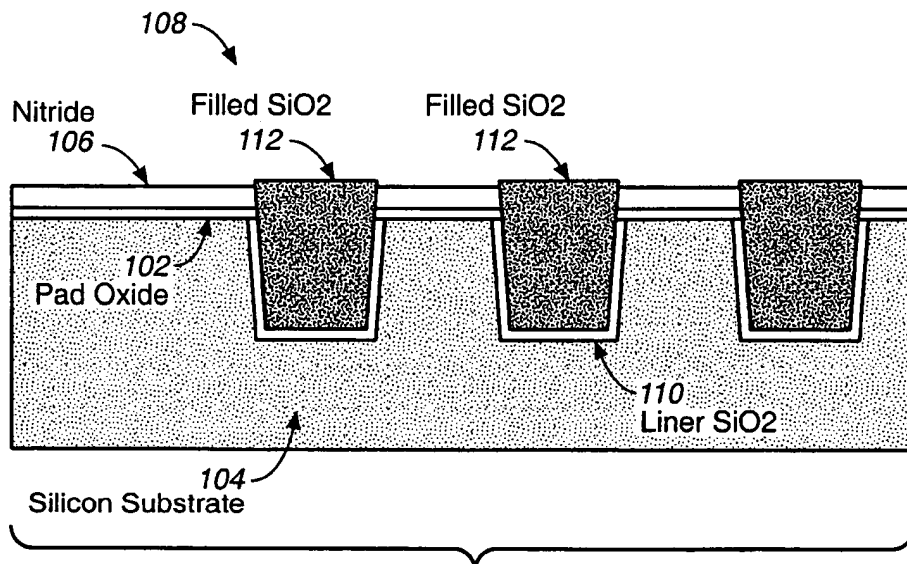
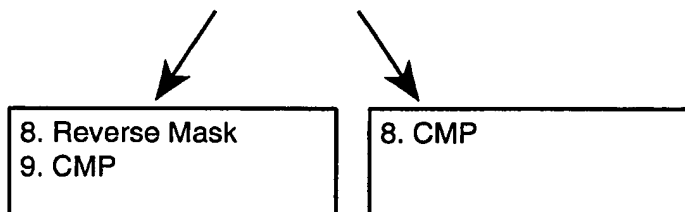




Shallow Trench Isolation Process Flow

1. Pad Oxide
2. Nitride: Trench Etch Hard Mask and CMP Stop Layer
3. Island Mask
4. Trench Etch
5. Oxide Liner: Corner Rounding
6. Trench Fill
7. Densification (Can Be Skipped)

**FIG. 1**

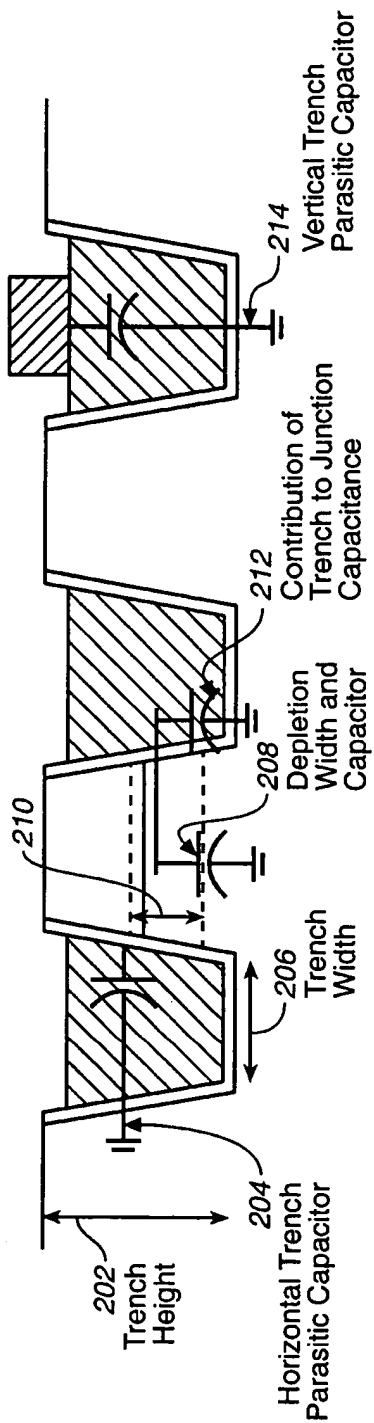


FIG. 2

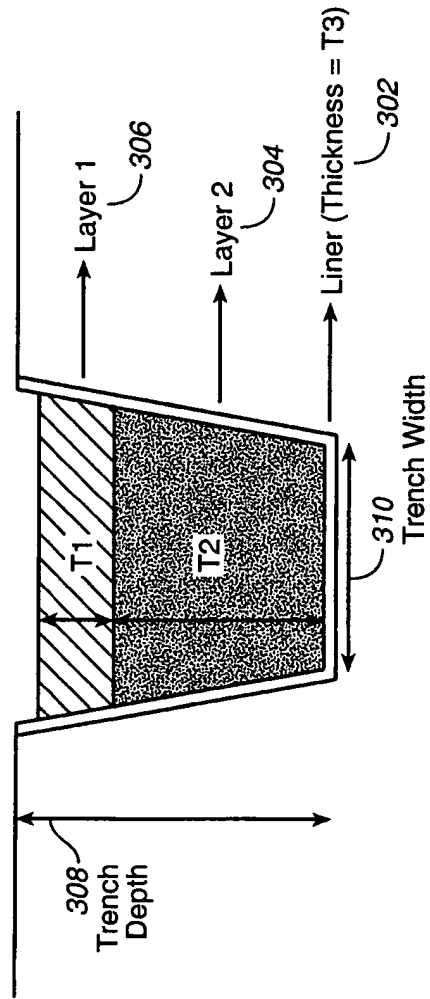


FIG. 3a

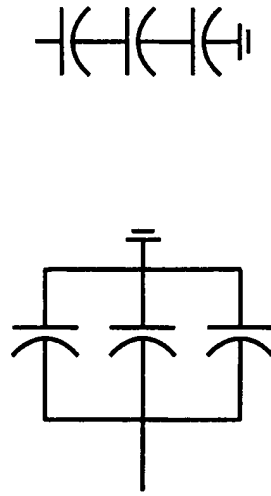
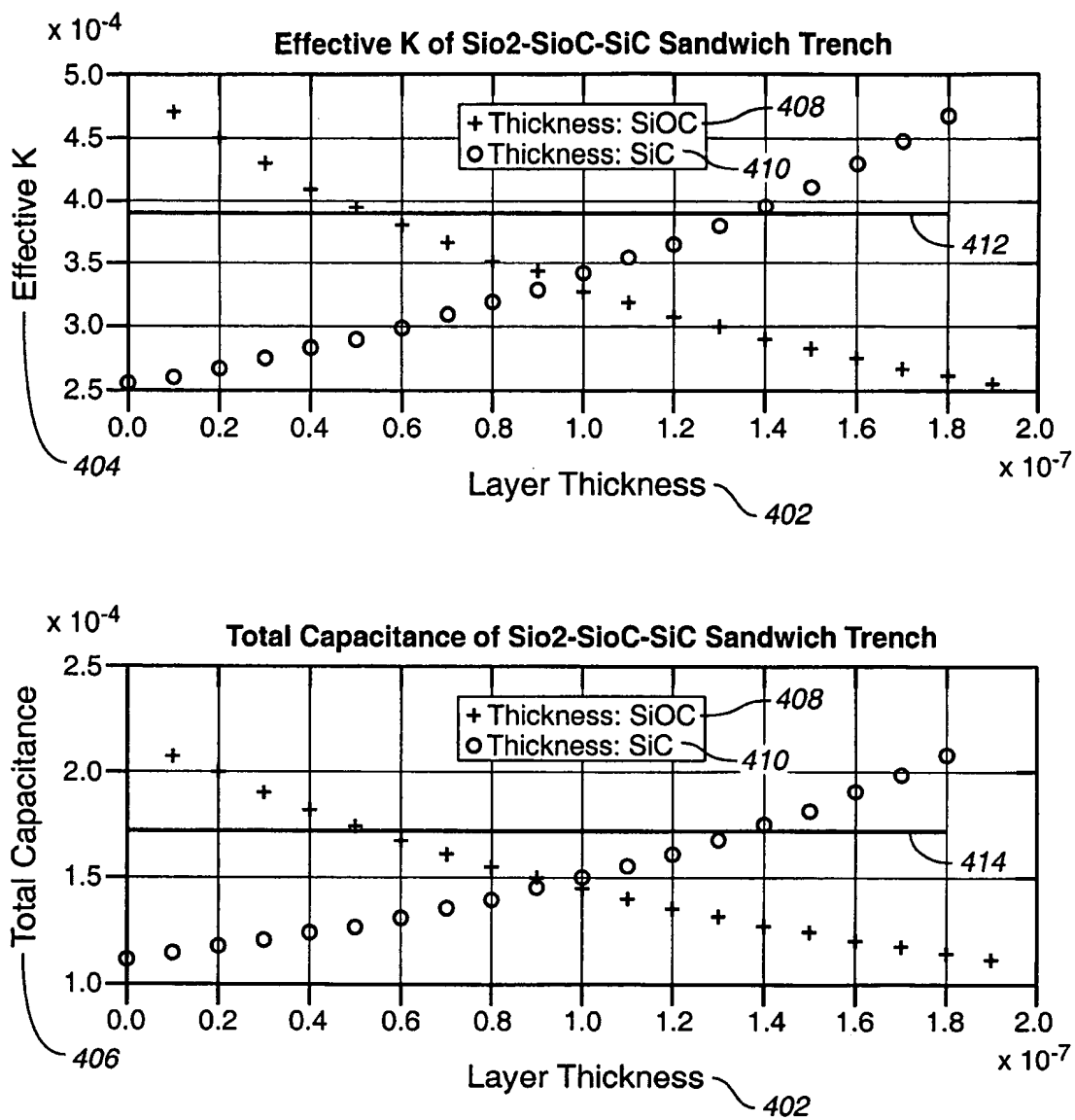


FIG. 3b

FIG. 3c

**FIG._4**

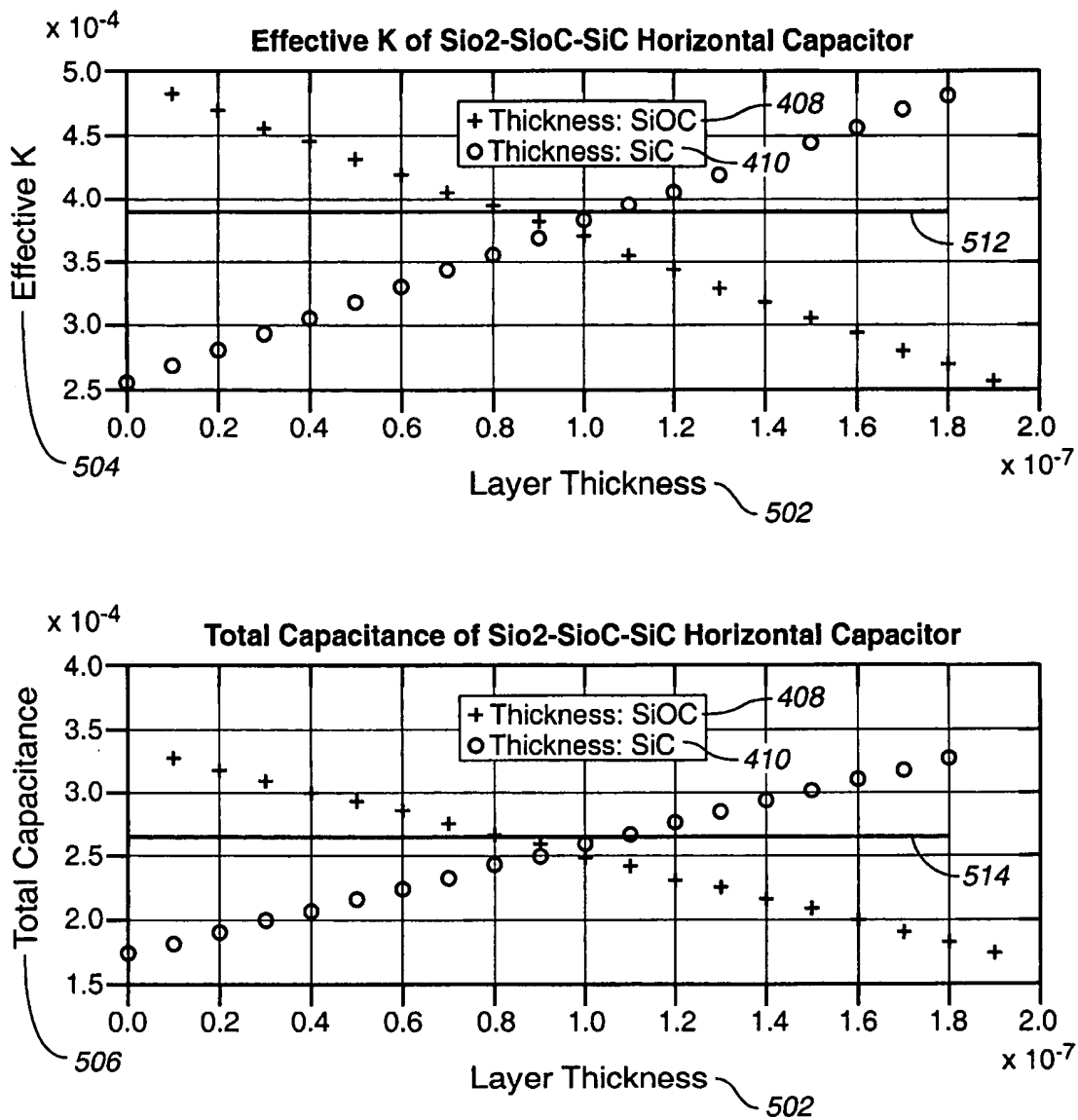
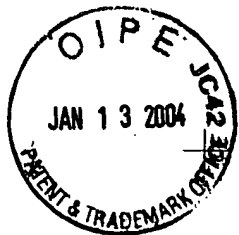


FIG._5